

A Systematic Review of Intimate Partner Violence Prevention Interventions Effects on Mental
Health

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Abstract

Background: Intimate partner violence (IPV) is a serious public health problem. It is estimated that three out of ten women will experience IPV. IPV is associated with a variety of negative mental health outcomes, such as post-traumatic stress disorder (PTSD), depression, and substance abuse. What is not known is the depth and extent of IPV interventions and if these will improve the detrimental effects of this type of violence on mental health.

Aims: This purpose of this systematic review is to examine whether interventions for intimate partner violence actually improve mental health outcomes.

Methods: Three databases were searched for intervention studies (experimental studies or meta-analyses of experiments): PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PsychInfo. The key words used in the search were “interventions” and “intimate partner violence”. The search parameters were research articles in English, human, adult, women, and published in the past 10 years (2003-2013). From a total of 301 articles found, 62 articles were chosen for closer screening. This closer screening led to a further reduction to 20 full text articles chosen to investigate further for eligibility. Two researchers reviewed these articles and extracted data about mental health outcomes.

Results: Findings show that the scope of the review further narrows the results to 7 articles which examine interventions related to mental health outcomes targeting adult women. This review demonstrates: 1) interventions for intimate partner violence have indicated potential for significant improvements for depressive symptoms, and 2) there is insufficient evidence to draw conclusive data about the effects of intimate partner violence interventions on other mental health outcomes.

Implications: Existing interventions for intimate partner violence used by clinicians appear to be beneficial in improving depressive symptoms. There is a need for further research concerning potential interventions for intimate partner violence, especially those which measure mental health outcomes.

Keywords: 1) Intimate Partner Violence; 2) Interventions; 3) Mental Health Outcomes; 4) Women; 5) Adult

BACKGROUND

Intimate partner violence (IPV) is a serious physical and mental health problem affecting an outstanding number of the population. In the United States, three out of ten women have experienced IPV, and additionally, they report an impact on their functioning related to the IPV (Center for Disease Control, 2012). Although, it should be noted that these numbers are most likely underestimates due to the fact that some cases of IPV will never be reported. Intimate partner violence is experienced between two people in a close relationship in which the following behaviors are perpetrated in a variety of ways: emotional abuse, physical abuse, sexual abuse, and threats (Center for Disease Control). Generally, IPV begins with emotional abuse. Effects of IPV on physical health can be detrimental, but the impact of these violent acts can take an extreme toll of the mental health of those involved as well. Emotional harm can include trauma symptoms, low self-esteem, trust issues, anger, stress, substance abuse, and depression (Center for Disease Control).

Current interventions for intimate partner violence which measure mental health outcomes include screening, education, mentorship, legal action, individual and group therapy (Gilbert et al., 2006; Hegarty et al., 2013; Nicolaidis et al., 2012; McWhirter, 2010; Taft et al., 2011; and Wright and Johnson, 2012). These sources also comprise the results of this paper. The settings for these interventions include a clinic setting, a shelter setting, a primary care office, and out in the community. Although interventions for intimate partner violence have been researched, it is unclear whether or not there is success in mental health outcomes across multiple studies. Therefore, the purpose of this systematic review is to examine the current research for intimate partner violence interventions targeting mental health outcomes and to determine further avenues for needed research if necessary.

METHODS

Review Method

The following question guided this review: “Among adult females, do interventions for intimate partner violence have a positive effect on the mental health outcomes?”

Data Sources and Search Strategy

Three databases were searched for intervention studies (experimental studies or meta-analyses of experiments): PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PsychInfo. The key words used in the search were “interventions” and “intimate partner violence”. The search parameters were research articles in English, human, adult, women, published in the past 10 years (2003-2013).

Review Selection

Initially, the same search was completed with the keywords “intimate partner violence” exchanged for “healthy relationships.” This search yielded 128 abstracts from Pubmed, 14 abstracts from CINAHL, and 10 abstracts from PsychInfo. In the first sort, only two articles were found to be of interest and the others were classified out of interest as either not female subjects, not interventions, or unrelated topics. With further investigation, these remaining two were additionally not of interest. It was then decided to change the search to the key words discussed in this review.

With the change made, the search yielded 229 abstracts from Pubmed, 34 abstracts from CINAHL, and 38 abstracts from PsychInfo for a total of 301. These also were initially sorted by briefly examining the abstracts to identify if they met desired search findings. This sorting process narrowed the search down to 60 total articles, using the same quick sorting criteria of not female subjects, not interventions, or unrelated topics. These articles were then studied more

extensively. It was found that according to the previous sorting measures, 40 more articles could be eliminated from the review with the addition of the sorting measure of only including studies which have a cultures fundamentally similar to the United States, this eliminated articles from some Eastern and Middle Eastern cultures where women sometimes have different roles and mores compared to Western cultures (Agency for Healthcare Research and Quality, 2004). The remaining 20 articles were examined to narrow the scope of the review to intervention studies which evaluated mental health outcomes as a study measure, and this narrowed the review down to seven articles.

Inclusion Criteria

The following inclusion criteria were used to select publications for this review: 1)

Figure 1: Flow of Data Collection

Identification

301 records identified through database searching

- 34 CINAHL
- 38 PsychInfo
- 229 PubMed

241 records eliminated because they did not meet the eligibility criteria of intimate partner violence intervention studies with female subjects, or they were duplications.

Screening

60 records screened

40 records excluded for not meeting eligibility criteria or they were studies from a culture fundamentally different from United States

Eligibility

20 full-text articles assessed for eligibility

13 full-text articles excluded:

- 3 were still in developmental stages with inconclusive data
- 10 were not interventional studies measuring mental health outcomes

Included

7 interventional research studies with MH outcomes included

research articles; 2) articles that came from peer-reviewed journals; 3) articles that were published in the past ten years (2003-2013); 4) studies that had adult women as the sample subjects; 5) articles that were written in English.

Outcomes

Articles were selected that had a mental health outcome component to the intervention design focusing on intimate partner violence. Mental health outcome measures found in the

Review of IPV Interventions with a focus on Mental Health Outcomes 7

review were identified as the following: alcohol use, anxiety, depression, mental health, mental wellbeing, post traumatic stress disorder, self-efficacy, self-esteem, stress, substance abuse, use of counseling services, and the use of anti-depressant medications.

Study Quality Assessment

The evidence was critically appraised using an adaptation of the “Rapid Critical Appraisal Questions for Randomized Controlled Trials” developed by Melnyk & Fineout-Overholt. All of the studies assessed in Table 3 were appraised to be of quality. The appraisal criteria found to be “not applicable” in Table 3 was related to the experiments being quasi-experimental and thus not eligible for randomization or random assignment.

Data Extraction

Table 2 findings were used to extract data to assess: author, purpose, research design, independent variable, dependent variable, sample, results, and level of evidence.

Grading of the Evidence

The types of studies, experimental and quasi-experimental, examined in this review determine the grade of the evidence. This level of evidence, 2 or 3, identified in Table 2 is on the higher end of the most common grading scales and could potentially serve as a means for clinical recommendation with enough supporting data (Melnik and Fineout-Overholt, 2011).

Analysis

The effects of mental health outcomes analyzed in this review were categorized as either positive or no effect measured. Since these results were drawn from experimental design research studies, no further analysis was performed.

Table 1

Critical Appraisal Tool

Critical Appraisal Categories	1	2	3	4	5	6	7
Assigned to Intervention group	Y	Y	Y	Y	Y	Y	Y
Random assignment concealed	N	NM	N	Y	N/A	Y	N
Subjects/Providers blind to study group	N/A	NM	N	N	N/A	Y	N
Reasons given if subjects did not complete study	N	Y	Y	Y	Y	Y	Y
Follow-up assessments adequate	Y	Y	Y	Y	Y	Y	Y
Subjects analyzed to group they were assigned	Y	Y	Y	Y	Y	Y	Y
Control group appropriate	N/A	Y	Y	Y	N/A	Y	Y
Instruments valid & reliable	Y	Y	Y	Y	Y	Y	Y
Significant effect for intervention	Y	Y	Y	Y	Y	Y	Y
All clinically important outcomes measured	Y	Y	Y	Y	Y	Y	Y
Treatment feasible in a clinical setting	Y	Y	Y	Y	Y	Y	Y

Note: 1) Adapted from “Rapid Critical Appraisal Questions for Randomized Controlled Trials” in Melnyk & Fineout-Overholt (2011); 2) Key: Y = yes; No = no; NM = not mentioned in article; N/A = not applicable; 3) References: 1) Davidson, et al. (2012); Gilbert, et al. (2006); 3) Hegarty, et al. (2013); 4) McWhirter (2010); 5) Nicolaidis, et al. (2012); 6) Taft, et al. (2011); 7) Wright, et al. (2012)

RESULTS

Intervention Characteristics

The interventions consisted of: 1) a five week career group counseling held once a week for two hour sessions; 2) a six week combination, meeting twice a week for two hours, of eleven group sessions and one individual session; 3) one to six individual counseling sessions with a primary care physician; 4) a five week group therapy sessions with two groups, goal oriented and emotion focused, which met weekly for 60 minutes with females only and then an additional 60 minutes with their children; 5) a six month peer advocacy program; 6) 12 months of weekly home visitations from a mentor; 7) the completion of a civil protection order.

Outcomes

The mental health outcome measures are identified and significant results for each outcome are shown in Table 3. All of the research analyzed examined depressive symptoms as an outcome. Five out of the seven studies found statistical significance in the outcome measurement for depressive symptoms after the varied interventions. While other outcomes were measured, there was no consistency across these outcomes in findings or there were too few studies that examined the outcome; hence, no conclusions can be made about other mental health outcomes at this point.

Table 2
Summary of Findings

AUTHOR (YEAR)	PURPOSE	RESEARCH DESIGN	INDEPENDENT VARIABLE	DEPENDENT VARIABLE	SAMPLE	RESULTS	LEVEL OF EVIDENCE
Davidson et al. (2012)	To examine the effectiveness of a five week career counseling intervention (ACCESS)	Replication-based and extension study	Advancing Career Counseling and Employment Support for Survivors (ACCESS), a five week group counseling intervention.	Change in anxiety and depressive symptoms from pre-intervention to post-intervention and eight week follow-up	Female survivors of intimate partner violence (n=73)	No significant change at post-intervention. Significant decreases in anxiety and depressive symptoms at eight week follow-up.	3
Gilbert et al. (2006)	To test the efficacy of the Relapse Prevention and Relationship Safety (RPRS) intervention	Randomized control trial	RPRS intervention: a six week combination of eleven group sessions and one individual session, meeting twice a week for two hours	Change in substance abuse, PTSD, depressive symptoms	Females on methadone who met intimate partner violence and drug use criteria (n=34)	Non-significant decrease in substance abuse (p=0.08) and PTSD symptoms (p=0.06). Significant decrease in depressive symptoms (p=0.01).	2

Table continues

Table 2
Summary of Findings

AUTHOR (YEAR)	PURPOSE	RESEARCH DESIGN	INDEPENDENT VARIABLE	DEPENDENT VARIABLE	SAMPLE	RESULTS	LEVEL OF EVIDENCE
Hegarty et al. (2013)	To assess whether a brief counseling with from family doctors trained to respond to women indentified through intimate partner violence screening would increase a women's mental health	Cluster randomized control trial	WEAVE intervention: training of doctors, notification of women screening positive for fear of partner, and invitation to women for one to six sessions of counseling for relationship and emotional issues.	Change in mental health, anxiety, and depressive symptoms	Female patients 16-50 years old, who screened positive for fear of partner in past 12 months (n=272)	No significant difference in mental health SF-12 (p=0.15) or anxiety symptoms (p=0.67). Significant decrease in depressive symptoms (p=0.01)	2
McWhirter (2010)	To evaluate and compare emotional focused versus goal oriented outcomes in a community based group therapy for victims of intimate partner violence	Multiple focused experimental construct	A five week group therapy session with two groups, goal oriented and emotion focused, which met weekly for 60 minutes with females only and then an additional 60 minutes with their children.	Change in depressive symptoms, self-efficacy, and alcohol use	Females exposed to intimate partner violence (n=46)	Significant improvement in depressive symptoms, self-efficacy, and discontinued alcohol consumption (p=<0.05)	2

Table continues

Table 2
Summary of Findings

AUTHOR (YEAR)	PURPOSE	RESEARCH DESIGN	INDEPENDENT VARIABLE	DEPENDENT VARIABLE	SAMPLE	RESULTS	LEVEL OF EVIDENCE
Nicolaidis et al. (2012)	To implement and evaluate intervention peer advocate intervention for depressed females with history of intimate partner violence	Community based participatory research Pre-post intervention design	Six month peer advocacy program which provided education, skills training, and case management, and use motivational interviewing.	Change in depressive symptoms, stress, self- esteem, use of counseling services, and use of anti- depressants	Female African Americans with depression and a history of intimate partner violence (n=59)	No significant change in use of anti- depressants (p=0.92). Significant improvement in depressive symptoms (p=<0.001), stress (p=0.004), self-esteem (p=<0.001), and use of counseling services (p=0.05)	3
Taft et al. (2011)	To test effectiveness of intimate partner violence intervention, MOSAIC, to improve health and wellbeing of abused women	Cluster randomized trial	MOSAIC (MOtherS' Advocates In the Community): 12 months of weekly home visitations from trained non- professional mentor mothers.	Change in depressive symptoms and mental wellbeing	Females who were abused and with child (n=114)	No significant change in depressive symptoms (p=0.2) or mental wellbeing SF- 36 (p=0.6)	2

Table continues

Table 2
Summary of Findings

AUTHOR (YEAR)	PURPOSE	RESEARCH DESIGN	INDEPENDENT VARIABLE	DEPENDENT VARIABLE	SAMPLE	RESULTS	LEVEL OF EVIDENCE
Wright and Johnson (2012)	To examine the effectiveness of using a civil protection order (CPO) against an abuser to improve mental health outcomes	Longitudinal sample study	Completion of a civil protection order and interview.	Change in depressive and PTSD symptoms	Female residents of a battered women's shelter (n=106)	No significant decrease in depressive symptoms (p=0.187). Significant decrease in PTSD symptoms (p=<0.001)	2

Table 3

Mental Health Outcome Measures

Outcome Measures:	1	2	3	4	5	6	7
Alcohol Use				↑			
Anxiety	↑		↔				
Depressive Symptoms	↑	↑	↑	↑	↑	↔	↔
Mental Health (SF-12)			↔				
Mental Wellbeing (SF-36)						↔	
PTSD		↔					↑
Self-Efficacy				↑			
Self-Esteem					↑		
Stress					↑		
Substance Abuse		↔					
Use of Counseling Services					↑		
Use of Anti-Depressants					↔		

Note: ↑ = positive change in mental health outcome measure. ↔ = no significant change in mental health outcome measure. Blank indicates outcome measure was not measured in interventional research. Research article reference: 1) Davidson et al., 2012; 2) Gilbert et al., 2006; 3) Hegarty et al., 2013; 4) McWhirter, 2011; 5) Nicolaidis et al., 2013; 6) Taft et al., 2011; 7) Wright and Johnson, 2012

Strengths and Limitations

The strength of this review is that it looked at studies using experimental designs from peer-reviewed journals. Publication is also a limitation to this review because valid research may not be published related to the results of the findings or recentness of the findings. Therefore, this unpublished data was not accessible to review. Also, the results found about the varied mental health outcomes were stated to be inconclusive due to the small sample size involved in the review findings. A greater effect may be found with a larger sample size of interventional studies.

DISCUSSION

Implications for Clinical Practice and Future Research

This review found that there is limited information available about interventional studies for intimate partner violence which investigate associated mental health outcomes. The current research can be identified as inconclusive, which means there is a need for future research in this area to educate clinicians on potential benefits for future practice. While there are not conclusions for practice, there are several implications for future research.

Recommendations for future research include: research with level one evidence to support practice, which would require meta-analysis and systematic reviews; simply more interventional research studies done for intimate partner violence which build the foundation for data collection; and a more inclusive scope of research which would target mental health outcomes, filling in the data gaps illustrated in Table 3. Ideas for future interventions include using online interventions which offer more privacy and accessibility, longer term interventions which may have a more significant outcomes especially in regards to mental health, and education about prevention for those at risk. Future settings for these interventions could include

on-line, in a clinic setting, in a hospital setting, in a shelter setting, in a home setting, in a primary care office, or out in the community.

REFERENCES

- Agency for Healthcare Research and Quality (August, 2004). Setting the Agenda for Research on Cultural Competence in Health Care: Introduction and Key Findings. Retrieved from <http://www.ahrq.gov/research/findings/factsheets/literacy/cultural/index.html>
- Centers for Disease Control. (2012). Understanding Intimate Partner Violence. Retrieved from http://www.cdc.gov/violenceprevention/pdf/ipv_factsheet-a.pdf.
- Davidson, M. M., Nitzel, C., Duke, A., Baker, C. M., & Bovaird, J. A. (January 01, 2012). Advancing career counseling and employment support for survivors: an intervention evaluation. *Journal of Counseling Psychology*, 59, 2, 321-8.
- Gilbert, L., El-Bassel, N., Manuel, J., Wu, E., Go, H., Golder, S., Seewald, R., & Sanders, G. (January 01, 2006). An integrated relapse prevention and relationship safety intervention for women on methadone: testing short-term effects on intimate partner violence and substance use. *Violence and Victims*, 21, 5, 657-72.
- Hegarty, K., O'Doherty, L., Taft, A., Chondros, P., Brown, S., Valpied, J., Astbury, J., & Gunn, J. (July 20, 2013). Screening and counselling in the primary care setting for women who have experienced intimate partner violence (WEAVE): a cluster randomised controlled trial. *The Lancet*, 382, 9888, 249-258.
- McWhirter, P. T. (January 01, 2011). Differential therapeutic outcomes of community-based group interventions for women and children exposed to intimate partner violence. *Journal of Interpersonal Violence*, 26, 12, 2457-82.
- Melnyk, B.M. & Fineout-Overholt, E. (2011). *Evidence-Based Practice in Nursing and Healthcare: A Guide to Best Practice*. Wolters Kluwer: Philadelphia.

Nicolaidis, C., Wahab, S., Trimble, J., Mejia, A., Mitchell, S. R., Raymaker, D., Thomas, M.

J., & Waters, A. S. (January 01, 2013). The Interconnections Project: development and evaluation of a community-based depression program for African American violence survivors. *Journal of General Internal Medicine*, 28, 4, 530-8.

Taft, A. J., Small, R., Hegarty, K. L., Watson, L. F., Gold, L., & Lumley, J. A. (January 01, 2011). Mothers' Advocates In the Community (MOSAIC)--non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *Bmc Public Health*, 11.

Wright, C. V., & Johnson, D. M. (December 01, 2012). Encouraging Legal Help Seeking for Victims of Intimate Partner Violence: The Therapeutic Effects of the Civil Protection Order. *Journal of Traumatic Stress*, 25, 6, 675-681.